

=> s (IL-1Ra or interleukin-1 receptor antagonist#)

1.1 5227 (IL-1RA OR INTERLEUKIN-1 RECEPTOR ANTAGONIST#)

=> s (IL-1Ra-R or interleukin-1 receptor antagonist related)

1.2 14 (IL-1RA-R OR INTERLEUKIN-1 RECEPTOR ANTAGONIST RELATED)

=> d 12 1-12 bib ab

1.2 ANSWER 1 OF 14 MEDLINE

AN 2001138840 MEDLINE

DN 21030891 PubMed ID: 11192058

TI Physical activity and plasma interleukin-6 in humans--effect of intensity of exercise.

AU Ostrowski K, Schjerling P, Pedersen B K

CS The Copenhagen Muscle Research Centre, Rigshospitalet Afs 7652, Denmark.

SO Eur J Appl Physiol. (2000 Dec) 83 (6) 512-5.

Journal code: 100954790 ISSN: 1439-6319

CY Germany; Germany, Federal Republic of

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200103

ED Entered STN: 20010404

Last Updated on STN: 20010404

Entered Medline: 20010308

AB The present study included data from three marathon races to investigate

the hypothesis that a relationship exists between running intensity and elevated concentrations of interleukin (IL)-6 in plasma. The study included a total of 53 subjects whose mean age was 30.6 [95% confidence

interval (CI) 1.4] years, mean body mass 77.7 (95% CI 2.0) kg, mean maximal oxygen uptake (VO₂max) 59.3 (95% CI 1.4) ml x min(-1) x kg(-1).

and who had participated in the Copenhagen Marathons of 1996, 1997 or 1998, achieving a mean running time of 206 (95% CI 7) min.

Running intensity was calculated as running speed divided by VO₂ max. The

concentration of IL-6 in plasma peaked immediately after the run. There was a negative correlation between peak IL-6 concentration and running time ($r = -0.30$, $P < 0.05$) and a positive correlation between peak IL-6 concentration and running intensity ($r = 0.32$, $P < 0.05$). The IL-1

receptor antagonist (IL-1Ra) plasma concentration peaked 1.5 h after the run and

there was a positive correlation between the peak plasma concentrations of IL-6 and ***IL*** + ***Ira*** ($r = 0.39$, $P < 0.01$). Creatine

kinase (CK) plasma concentration peaked on the 1st day after the run but plasma IL-6 concentration and running intensity were not significantly correlated. The plasma IL-6 concentration was negatively correlated with the plasma creatine kinase concentration ($r = -0.25$, $P < 0.05$).

plasma IL-6 concentration and running intensity, but did not confirm the

previous finding of a connection between IL-6 plasma concentration and muscle damage

1.2 ANSWER 2 OF 14 MEDLINE

AN 97225342 MEDLINE

DN 97225342 PubMed ID: 9071715

TI Lipopolysaccharide-binding protein and bactericidal/permeability-

increasing factor during hemodialysis: clinical determinants and role of different membranes.

AU Sundaram S, King A J, Pereira B J

CS Division of Nephrology, New England Medical Center, Boston, Massachusetts 02111, USA.

NC DK 45609 (NIDDK)

SO JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY, (1997 Mar) 8 (3) 463-70.

Journal code: 9013836 ISSN: 1046-6673.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199706

ED Entered STN: 19970620

Last Updated on STN: 19970620

Entered Medline: 19970611

AB The host response to the presence of lipopolysaccharide (LPS) is complex and varied. Two closely related endogenous serum proteins, LPS-binding

protein (LBP) and bactericidal/permeability-increasing factor (BPI), regulate delivery of LPS to CD14 antigen on effector cell surfaces and modulate the host response to LPS. In the study presented here, plasma

levels of LBP and BPI were measured, predialysis, 15 min into dialysis and postdialysis in patients dialyzed with cellulose, cellulose-tri-acetate

(CTA), and polysulfone dialyzers. Further, the association between LBP

levels and BPI release during hemodialysis and clinical and laboratory

characteristics of patients, complement activation represented by plasma

C3a levels, and monocyte cytokine production represented by interleukin-1

receptor antagonist (IL-1Ra) synthesis was also studied.

Predialysis

plasma levels of LBP were $14,459 \pm 544$, $13,889 \pm 1362$ and $12,622 \pm 6305$ ng/ml, respectively, with cellulose, CTA, and polysulfone

dialyzers. Postdialysis levels were $17,834 \pm 861$, $20,979 \pm 8485$ and $18,177 \pm 1656$ ng/ml, respectively. Postdialysis plasma levels of LBP were

consistently higher than predialysis levels with all three dialyzers ($P < 0.05$). However, plasma LBP levels were not significantly different between

the cellulose and polysulfone dialyzers ($P > 0.05$).

dialysis with CTA (10.91 ± 3.65 ng/ml.) and polysulfone (10.73 ± 2.24 ng/ml.) dialyzers were significantly greater ($P < 0.05$) than that observed with cellulose (5.49 ± 0.66 ng/ml.). Similarly, postdialysis levels with CTA and polysulfone were significantly greater ($P < 0.05$) than that observed with cellulose dialyzers. The percentage change in BPI levels between predialysis and 15 min was $1341 \pm 243\%$, $2935 \pm 1033\%$, and $3790 \pm 1151\%$ for cellulose, CTA, and polysulfone dialyzers, respectively. The changes in BPI levels from predialysis to 15 min and between predialysis and postdialysis samples were statistically significant for all three dialyzers ($P < 0.05$). Postdialysis LBP:BPI ratios were $50 \pm 6\%$, $18 \pm 4\%$, and $22 \pm 6\%$ of predialysis ratios for cellulose, CTA, and polysulfone dialyzers, respectively. These changes were statistically significant ($P < 0.05$) for all three dialyzers. There was no significant correlation between baseline clinical or laboratory characteristics and predialysis LBP levels. Similarly, the correlation between BPI levels at 15 min of dialysis with the clinical and laboratory characteristics was also poor, with the exception of serum albumin ($r = 0.43$, $P = 0.008$). The correlation between BPI levels at 15 min of dialysis with plasma LBP levels ($r = -0.29$, $P = 0.08$), plasma C3a levels ($r = -0.1$, $P = 0.55$), peripheral blood mononuclear cells (PBMC) content of $***IL-1\alpha***$, $***IL-1\beta***$ ($***r*** = 0.01$, $P = 0.94$), and IL-1Ra production by unstimulated ($r = 0.13$, $P = 0.45$), and endotoxin-stimulated PBMC ($r = 0.32$, $P = 0.06$) was not statistically significant. The results of this study demonstrate that dialysis with cellulose, CTA, and polysulfone dialyzers results in a significant increase in LBP and BPI levels. BPI release is probably mediated by non-complement factors and may be related to the nutritional status of the patient. The release of BPI during HD and consequent lowering of the LBP:BPI ratio could potentially afford some protection against endotoxin in the dialysate.

1.2 ANSWER 3 OF 14 MEDLINE
AN 96416422 MEDLINE
DN 96416422 PubMed ID: 8928570

TI [Practical significance of cytokine determination in joint fluid in patients with arthroses or rheumatoid arthritis].
Praktische Bedeutung der Zytokinbestimmung im Gelenkpunktat von Patienten mit Arthrosen oder rheumatischen Arthritiden
AU Neidel J, Schulz M, Sova L, Lindschau J
CS Abt für Orthopädie, Rheumaklinik Bad Bramstedt, Medizinische Hochschule

Journal code: 1256465, ISSN: 0044-3220.
CY GERMANY, Germany, Federal Republic of
DT Journal; Article, (JOURNAL ARTICLE)
LA German
FS Priority Journals
EM 199611
ED Entered STN: 19961219
Last Updated on STN: 20000303
Entered Medline: 19961114
AB OBJECTIVE: To determine whether the activity of cartilage-degrading enzymes in the synovial fluid (SF) of patients with rheumatoid arthritis and other joint diseases is correlated with the concentration of cytokines in the SF. METHODS: Cytokines and cartilage-degrading enzymes were determined in the SF of 97 patients with various disorders involving the knee joints (rheumatoid arthritis (RA) n 44; osteoarthritis (OA) n 35; meniscal trauma (Men) n 10; reactive arthritides (ReA) n 8). In these samples we measured the concentrations of interleukin-1 alpha and beta, IL-1-receptor antagonist (IL-1Ra), IL-6, IL-8, tumor necrosis factor alpha (TNF alpha; all by ELISA), collagenase-activity and caseinase-activity (by substrate assays). RESULTS: With the exception of IL-1 alpha and IL-6, cytokine-concentrations were significantly higher in RA than in OA SF-samples ($p < 0.05$; ANOVA on ranks). IL-1Ra, IL-6, and IL-1 beta were correlated best with the collagenase-activity in the SF ($r = 0.63$, 0.57 , 0.55 ; Spearman's rank correlation), while IL-1 beta ($r = 0.53$) and $***IL-1\alpha***$, $***IL-1\beta***$, $***IL-8***$ ($***r*** = 0.52$) were best correlated with the caseinase-activity in the samples. The SF-concentration of IL-1Ra was well correlated with the levels of IL-6, IL-1 beta, IL-8, and TNF alpha (r from 0.73 to 0.66; all $p < 0.005$), but not with IL-1 alpha. The molar ratio of IL-1 to IL-1Ra in the SF was neither correlated with the activity of collagenase nor caseinase. IL-1 beta and IL-1Ra in the SF were positively correlated with the erythrocyte sedimentation rate (ESR). CONCLUSIONS: The determination of IL-1 beta and IL-1Ra in the SF of patients with joint disorders as examined in this study seems to allow to a certain extent a prediction of the collagenase- and caseinase-activity contained in the diseased joint. We would favor.

1.2 ANSWER 4 OF 14 MEDLINE
AN 96188960 MEDLINE
DN 96188960 PubMed ID: 8608647
TI Significance of IL-1beta and IL-1 receptor antagonist (IL-1Ra) in bronchoalveolar lavage fluid (BAL F) in patients with diffuse

CS Second Department of Internal Medicine, Nagasaki University School of Medicine, Japan.
SO CLINICAL AND EXPERIMENTAL IMMUNOLOGY, (1996 Mar) 103 (3) 461-6.
Journal code: 0057202, ISSN: 0009-9104.
CY ENGLAND; United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199605
ED Entered STN: 19960605
Last Updated on STN: 19960605
Entered Medline: 19960528
AB We evaluated the effect of erythromycin therapy on pulmonary function tests and the airway inflammatory response of patients with DPB. The number of neutrophils in BALF obtained from DPB patients was significantly higher than that of healthy volunteers. Treatment with erythromycin (600 mg/day for 12.9+/-9.5 months (mean +/- s.d.)) significantly reduced the total number of cells and neutrophils in the airway, and significantly improved pulmonary function tests. The levels of IL-1beta and IL-8 were significantly higher in DPB compared with healthy volunteers (P<0.05, P<0.05, respectively). IL-1Ra in patients is considered to have a weak inhibitory activity for IL-1beta, with approximately five-fold concentration of IL-1beta compared with that in healthy volunteers (approx. nine-fold concentration of IL-1beta). Erythromycin therapy significantly reduced these cytokines to levels comparable to those of healthy volunteers, and produced a trend toward reduction in the level of IL-1Ra in BALF. The level of IL-1beta correlated significantly with the concentration of neutrophils in BALF ($r=0.72$, $P<0.01$), as well as with the level of ***IL*** - ***1Ra*** ($***r*** = 0.688$, $P<0.05$ and IL-8 ($r=0.653$, $P<0.05$). A nearly significant or significant correlation was observed between the concentration of neutrophils and levels of IL-1Ra or IL-8 in BALF ($r=0.526$, $P=0.053$ or $r=0.776$, $P<0.01$, respectively). There was also a significant relationship between FEV(1) and the concentration of neutrophils in BALF ($r=0.524$, $P<0.05$). Our results suggest that the relative amounts of IL-1beta and IL-1Ra or IL-8 may contribute, at least in part, to the neutrophil-mediated chronic airway inflammation in patients with chronic airway disease, and long-term erythromycin therapy may down-regulate the vigorous cycle between the cytokine network and neutrophil accumulation, with resultant reduction of neutrophil-mediated inflammatory response.

TI Soluble cytokine receptors and the low 3,5,3'-triiodothyronine syndrome in patients with nonthyroidal disease
AU Boelen A, Platvoet-Ter Schiphorst M C, Wiersinga W M
CS Department of Endocrinology, University of Amsterdam, The Netherlands
SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1995 Mar) 80 (3) 971-6.
Journal code: 0375362, ISSN: 0021-972X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199504
ED Entered STN: 19950425
Last Updated on STN: 19950425
Entered Medline: 19950411
AB Cytokines have been implicated in the pathogenesis of the low T3 syndrome during illness. This is supported by our recent observation of a strong negative relationship between serum T3 and serum interleukin-6 (IL-6) in nonthyroidal illness (NTI). In the last few years, soluble cytokine receptors and cytokine receptor antagonists have been discovered in human serum. These proteins have the potential to further regulate cytokine activity. Therefore, we now studied the association between serum T3 and serum levels of soluble tumor necrosis factor-alpha (sTNF alpha R p55 and sTNF alpha R p75), soluble interleukin-2 receptor (sIL-2R), and the interleukin-1 receptor antagonist (IL-1RA) in 100 consecutive hospital admissions with a wide variety of nonthyroidal diseases. Patients were divided into group A (T3, $> or = 1.30$ nmol/L; T4, $> or = 75$ nmol/L; n = 41), group B (T3, < 1.30 nmol/L; T4, $> or = 75$ nmol/L; n = 46), and group C (T3, < 1.30 nmol/L; T4, < 75 nmol/L; n = 13). Serum sTNF alpha R p55, sTNF alpha R p75, sIL-2R, and IL-1RA were lower in group A than in groups B and C [median values; sTNF alpha R p55, 1.25, 2.25, and 3.55 ng/mL (P < 0.001); sTNF alpha R p75, 2.02, 4.56, and 7.00 ng/mL (P < 0.001); sIL-2R, 184, 259, and 272 U/mL (P = 0.0004), respectively]. Serum IL-1RA levels were not different in the three groups (median values, 122, 193, and 258 ng/mL, respectively). Taking all patients together, a significant negative relation was found among serum T3 and sTNF alpha p55 ($r = -0.59$, $P < 0.0001$), sTNF alpha R p75 ($r = -0.55$, $P < 0.0001$), sIL-2R ($r = -0.54$, $P < 0.0001$), ***IL*** - ***1RA*** ($***r*** = -0.38$, $P < 0.001$), and IL-6 ($r = -0.56$, $P < 0.0001$). A remarkable high correlation ($r = -0.70$, $P < 0.0001$) was found between serum T3 and a newly designed total score based on the concentrations of sTNF alpha R p55, sTNF alpha R p75, sIL-2R, and IL-1RA.

regression indicated IL-6 and sTNF alpha R p75 as independent determinants of T3 [serum T3 = 2.09-0.32ln (sTNF alpha R p75) -0.15ln (IL-6), r 0.70]. The variability in serum T3 was accounted for 35% by changes in ln (sTNF alpha R p75) and 14% by changes in ln (IL-6). (ABSTRACT TRUNCATED AT 400 WORDS)

1.2 ANSWER 6 OF 14 MEDLINE
AN 95060548 MEDLINE
DN 95060548 PubMed ID: 7526306
TI Increased concentrations of cytokines interleukin-6 and interleukin-1
receptor antagonist in plasma of women with preeclampsia: a mechanism for
endothelial dysfunction?
AU Greer I A, Lyall F, Perera T, Boswell F, Macara I M
CS Department of Obstetrics and Gynecology, Royal Infirmary, Glasgow,
Scotland, United Kingdom
SO OBSTETRICS AND GYNECOLOGY, (1994 Dec) 84 (6)
937-40.
Journal code: 0401101, ISSN: 0029-7844.
CY United States
DT Journal Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals, Priority Journals
EM 199412
ED Entered STN, 19950110
Last Updated on STN, 19960129
Entered Medline: 19941213
AB OBJECTIVE: To determine if plasma concentrations of defined cytokines are
increased in women with preeclampsia, and to correlate any increases with
the elevated concentrations of the vascular cell adhesion molecule
(VCAM)-1. METHODS: Twenty primigravidas with preeclampsia were compared to
20 healthy primigravidas. Plasma levels of cytokines, tumor necrosis
factor-alpha (TNF alpha), interleukin (IL)-6, IL-8, IL-1 beta, IL-1
receptor antagonist (IL-1ra), granulocyte macrophage-colony-stimulating
factor (GM-CSF), and VCAM-1, were measured by enzyme-linked immunosorbent
assay. RESULTS: Concentrations of IL-6 and IL-1ra were significantly
higher ($P < .01$) in preeclamptic women (2.56 and 251.85 pg/ml., respectively) compared to normal pregnant patients (2.06 and 142.00 pg/ml., respectively). There were no significant changes in concentrations of TNF
alpha, IL-8, GM-CSF, and IL-1 beta in preeclamptic patients (14.09, 50.52,
125.8, and 2.08 pg/ml., respectively) compared to normal patients (11.96,
44.46, 121.3, and 2.01 pg/ml., respectively). Serum concentrations of

VCAM-1 were increased in women with preeclampsia (preeclamptic group 841.9 \pm 49.7 ng/ml., control group 560.2 \pm 47.9 ng/ml., $t = 3.673$, $P < .001$).

Interleukin-6 and IL-1 α concentrations correlated with VCAM-1 concentrations (IL-6: $r = 0.539$, $z = 2.9$, $P < .005$, ***; IL-1 α : $r = 0.451$, $z = 2.15$, $P < .03$, **).

underlying leukocyte activation in this disorder. The increased cytokine concentration may also be responsible for the endothelial adhesion that accompanies preeclampsia.

L2 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2002 ACS
AN 2001435130 CAPLUS
DN 13541824
TI DNA encoding human and murine ***interleukin*** -
I
 receptor - ***antagonist*** - ***related*** molecules
IN Saris, Christian M.; Giles, Jennifer; Mu, Sharon X.; Xia, Min;
Bass.
 Michael Brian, Craveiro, Roger
PA Amgen, Inc., USA
SO PCT Int. Appl., 190 pp
 CODEN: PIXXD2
DT Patent
LA English
FAN CNT 1
 PATENT NO. KIND DATE APPLICATION NO.
DATE

PI WO 2001042304 A1 20010614 WO 2000-US32940
20001209
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY,
BZ, CA, CH, CN,
 CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE,
GH, GM, HR,
 HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT,
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ,
PL, PT, RO, RU,
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
UZ, VN,
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM,
 RW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW,
AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
TR, BE,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD,
TG
PRAI US 1999-170191P P 19991210
 US 2000-188053P P 20000309
 US 2000-194521P P 20000404
 US 2000-195910P P 20000410
AB The present invention provides nucleic acid mols. encoding
novel
 Interleukin - ***I*** ***Receptor***
Antagonist -
 Related (***I*** - ***Ira*** - ***R***)
polypeptides
 The cDNAs encoding human and murine ***I*** - ***Ira***
- ***R***
 were cloned and the expression in several human tissues were
examined by
 either RT-PCR or in situ hybridization ***I*** - ***Ira***
- ***R***
 R was expressed in E. coli and mammalian cell and anti-
I
- ***Ira*** - ***R*** antibody was produced. The biological
activity of
 I - ***Ira*** - ***R*** was assessed in transgenic
mice. The
 invention also provides selective binding agents, vectors, host

diagnosis, treatment, amelioration, and/or prevention of diseases, disorders, and conditions assocd with ***IL*** - ***Ira*** - ***R*** polypeptides

RE.CNT 6 THERE ARE 6 CITED REFERENCES
AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

1.2 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2002 ACS
AN 1996 259086 CAPLUS
DN 124:331889
TI Significance of IL-1 beta and IL-1 receptor antagonist (IL-1Ra) in bronchoalveolar lavage fluid (BALF) in patients with diffuse panbronchiolitis (DPB)
AU Kadota, J.; Matsubara, Y.; Ishimatsu, Y.; Ashida, M.; Abe, K.; Shirai, R.; Iida, K.; Kawakami, K.; Taniguchi, H., et al.
CS School Medicine, Nagasaki University, Nagasaki, 852, Japan
SO Clin. Exp. Immunol. (1996), 103(3), 461-6
CODEN CEXIAL; ISSN: 0009-9104
DT Journal
LA English
AB We evaluated the effect of erythromycin therapy on pulmonary function tests and the airway inflammatory response of patients with DPB. The no. of neutrophils in BALF obtained from DPB patients was significantly higher than that of healthy volunteers. Treatment with erythromycin (600 mg/day for 12.sum.9.+-.9.sum.5 mo (mean .+- . s.d.)) significantly reduced the total no. of cells and neutrophils in the airway, and significantly improved pulmonary function tests. The levels of IL-1 beta and IL-8 were significantly higher in DPB compared with healthy volunteers (P < 0.sum.05, P < 0.sum.05, resp.). IL-1Ra in patients is considered to have a weak inhibitory activity for IL-1 beta, with approx. five-fold concn. of IL-1 beta, compared with that in healthy volunteers (approx. nine-fold concn. of IL-1 beta). Erythromycin therapy significantly reduced these cytokines to levels comparable to those of healthy volunteers, and produced a trend toward redn. in the level of IL-1Ra in BALF. The level of IL-1 beta correlated significantly with the concn. of neutrophils in BALF ($r = 0.72$, $P < 0.01$), as well as with the level of ***IL*** - ***Ira*** ($r = 0.688$, $P < 0.05$) and IL-8 ($r = 0.653$, $P < 0.05$). A nearly significant or significant correlation was obsd between the concn. of neutrophils and levels of IL-1Ra or IL-8 in BALF ($r = 0.526$, $P = 0.053$ or $r = 0.776$, $P < 0.01$, resp.). There was also a significant relation between FEV1 and the concn. of neutrophils in BALF ($r = 0.524$, $P < 0.05$). Our results suggest that the relative amts. of IL-1 beta and IL-1Ra or IL-8 may contribute, at least in part, to the neutrophil-mediated chronic airway inflammation in patients with

with resultant redn. of neutrophil-mediated inflammatory response.

1.2 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2002 ACS
AN 1995:437486 CAPLUS
TI Soluble cytokine receptors and the low 3,5,3'-triiodothyronine syndrome in

patients with nonthyroidal disease
AU Boelen, A.; Schiphorst, M. C.; Platvoet-ter Wiersinga, W. M.
CS Department of Endocrinology, Univ. of Amsterdam,
Amsterdam, Neth
SO J. Clin. Endocrinol. Metab. (1995), 80(3), 971-6
CODEN: JCENAZ; ISSN: 0021-972X
DT Journal
LA English
AB Cytokines have been implicated in the pathogenesis of the low T3 syndrome during illness. This is supported by our recent observation of a strong neg. relationship between serum Tc and serum interleukin-6 (IL-6) in nonthyroidal illness (NTI). In the last few years, sol. cytokine receptors and cytokine receptor antagonists have been discovered in human serum. These proteins have the potential to further regulate cytokine activity. Therefore, we now studied the assoen. between serum T3 and serum levels of sol. tumor necrosis factor- alpha. receptors (sTNF.alpha.R p55 and sTNF.alpha.R p75), soluble interleukin-2 receptor (sIL-2R), and the interleukin-1 receptor antagonist (IL-1RA) in 100 consecutive hospital admissions with a wide variety of nonthyroidal diseases. Patients were divided into group A (T3, \geq 1.30 nmol/L; T4, \geq req.75 nmol/L; n = 41), group B (T3, <1.30 nmol/L; T4, \geq req.75 nmol/L; n = 46), and group C (T3, <1.30 nmol/L; T4, <75 nmol/L; n = 13). Serum sTNF.alpha.R p55, sTNF.alpha.R p75, sIL-2R, and IL-1RA were lower in group A than in groups B and C [median values: sTNF.alpha.R p55, 1.26, 2.25, and 3.55 ng/ml, (P < 0.001); sTNF.alpha.R p75, 2.02, 4.56, and 7.00 ng/ml, (P < 0.001), sIL-2R, 184, 259, and 272 U/ml, (P = 0.0004), resp.]. Serum IL-1RA levels were not different in the three groups (median values, 122, 193, and 258 pg/ml.). Taking all patients together, a significant neg. relation was found among serum T3 and sTNF.alpha.R p55 ($r = -0.59$, $P < 0.001$), sTNF.alpha.R p75 ($r = -0.55$, $P < 0.0001$), sIL-2R ($r = -0.54$, $P < 0.0001$), ***IL*** - ***Ira*** ($r = -0.38$; $P < 0.001$), and IL-6 ($r = -0.56$, $P < 0.0001$). A remarkable high correlation ($r = -0.70$, $P < 0.0001$) was found between serum T3 and a newly designed total score summation of serum levels of IL-6 and the four sol. cytokine receptor proteins. IL-6 and the four cytokine receptor proteins were all

The variability in serum T3 was accounted for 35% by changes in ln (sTNF alpha R p75) and 14% by changes in ln (IL-6). In conclusion, 1) serum T3 is neg. related to serum sTNF alpha R p55, sTNF alpha R p75, sIL-2R, IL-1RA, and IL-6 in patients; and 2) sTNF alpha R p75 and IL-6 are independent determinants of serum T3 in NTI, accounting for 35% and 14%, resp., of the variability in T3. The results suggest that the sick euthyroid syndrome is part of the acute phase response during illness generated by activation of the cytokine network.

1.2 ANSWER 10 OF 14 USPATFULL

AN 2002.5759 USPATFULL

TI Interleukin-1 receptor antagonist and recombinant production thereof

IN Ford, John, San Mateo, CA, United States

Pace, Ann, Scotts Valley, CA, United States

PA Hyseq, Inc., Sunnyvale, CA, United States (U.S. corporation)

PI US 6337072 B1 20020108

AI US 1999-348942 19990707 (9)

RL1 Continuation-in-part of Ser. No. US 1999-287210, filed on 5 Apr 1999,

now abandoned Continuation-in-part of Ser. No. US

1999-251370, filed on

17 Feb 1999, now abandoned Continuation-in-part of Ser. No.

US

1999-229591, filed on 13 Jan 1999, now abandoned

Continuation-in-part of

Ser. No. US 1998-127698, filed on 31 Jul 1998, now abandoned

Continuation of Ser. No. US 1998-99818, filed on 19 Jun 1998,

now

abandoned Continuation of Ser. No. US 1998-82364, filed on 20 May 1998,

now abandoned Continuation-in-part of Ser. No. US

1998-79909, filed on

15 May 1998, now abandoned Continuation-in-part of Ser. No.

US

1998-55010, filed on 3 Apr 1998, now abandoned

PRA1 WO 1999-US4291 19990405

DT Utility

FS GRANTED

EXNAM Primary Examiner: Spector, Lorraine

LREP Marshall, O'Toole, Gerstein, Murray & Borun

CLMN Number of Claims: 37

ECL Exemplary Claim: 1,15

DRWN 4 Drawing Figure(s); 4 Drawing Page(s)

LN CNT 5025

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel nucleic acids, the novel polypeptide sequences encoded by these nucleic acids and uses thereof

These novel polynucleotide and polypeptide sequences were determined to

be a novel Interleukin-1 Receptor Antagonist

1.2 ANSWER 11 OF 14 USPATFULL

AN 2001.163320 USPATFULL

TI Anti-interleukin-1 receptor antagonist antibodies and uses thereof

IN Ford, John, San Mateo, CA, United States

Pace, Ann, Scotts Valley, CA, United States

PA Hyseq, Inc., Sunnyvale, CA, United States (U.S. corporation)

PI US 6337072 B1 20020108

now

abandoned Continuation-in-part of Ser. No. US 1999-251370, filed on 17

Feb 1999, now abandoned Continuation-in-part of Ser. No. US 1998-127698,

filed on 31 Jul 1998, now abandoned Continuation-in-part of Ser. No. US 1999-229591, filed on 13 Jan 1999, now abandoned

Continuation of Ser.

No. US 1998-99818, filed on 19 Jun 1998, now abandoned, said Ser. No.

US 127698 Continuation-in-part of Ser. No. US 1998-82364, filed on 20

May 1998, now abandoned, said Ser. No. US 99818 Continuation-in-part of

Ser. No. US 1998-82364, filed on 20 May 1998, now abandoned

Continuation-in-part of Ser. No. US 1998-79909, filed on 15 May 1998,

now abandoned Continuation-in-part of Ser. No. US 1998-55010, filed on 3

Apr 1998, now abandoned

DT Utility

FS GRANTED

EXNAM Primary Examiner: Spector, Lorraine

LREP Marshall, O'Toole, Gerstein, Murray & Borun

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN 15 Drawing Figure(s); 14 Drawing Page(s)

LN CNT 4656

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel nucleic acids, the novel polypeptide sequences encoded by these nucleic acids and uses thereof.

These novel polynucleotide and polypeptide sequences were determined to

be a novel Interleukin-1 Receptor Antagonist. Also provided are antibodies which bind the antagonist, methods of detecting the antagonist, and kits containing the antibodies.

1.2 ANSWER 12 OF 14 USPATFULL

AN 1999-132765 USPATFULL

TI Method of treatment of osteoarthritis with interleukin-1 receptor antagonist

antagonist

IN Pelletier, Jean-Pierre, St-Lambert, Canada

Martel-Pelletier, Johanne, St-Lambert, Canada

PA Arthro Lab Inc., Sherbrooke, Canada (non-U.S. corporation)

PI US 5972880 19991026

AI US 1996-612433 19960307 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Mertz, Prema

LRFP ROBIC

CLMN Number of Claims: 3

ECL Exemplary Claim: 1

DRWN 2 Drawing Figure(s); 2 Drawing Page(s)

LN CNT 745

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method and a composition for the preventative treatment of osteoarthritis comprising the periodic administration to a mammal

suffering of this disease of a composition comprising an amount of Human recombinant Interleukin-1 receptor antagonist effective for reducing the